

PROJECT NUMBER: 0008
PROJECT TITLE: Computer Applications/Lab Systems
PROJECT LEADER: Mark Allred
PERIOD COVERED: February, 1988

I. GENERAL ANALYTICAL LIMS MIGRATION

- A. **Objective:** Move General Analytical LIMS and data collection functions off of the HP 1000 LABSAM and LAS system.
- B. **Results:** Gave GA access to GA LIMS Prototype. The "Hot Water Solubles" gravimetric workstation is near completion. When this unit is installed, the off-loading of gravimetric instruments from the HP 1000 will be completed. Ordered hardware and software to off-load chromatographic instruments.
- C. **Conclusions:** Move ahead with off-loading the data collection and analysis functions from the HP 1000. Continue refining the GA LIMS Prototype.
- D. **Plans:** Develop file transfer procedures between LABSAM on the HP 1000 and GA LIMS on the UNIX host. Finish the gravimetric area, including documentation. Test GA LIMS with complete dataset from LABSAM.

II. CTSD MODERNIZATION

- A. **Objective:** Eliminate obsolete and difficult to maintain equipment in the CTSD area.
- B. **Results:** Development required to eliminate dependency on the Honeywell Level 6 computer is completed. Equipment is on order to complete the installation. Dependency on the Decsystem 20 computer has been eliminated. A Functional Specification for the Gas Phase project has been generated by Development Engineering (DE) and is in review.
- C. **Conclusions:** This is a long-term effort involving CAD, DE, and CTSD.
- D. **Plans:** Finish Strip Chart Graphics application. Review Gas Phase Functional Specification. Develop design and implementation plans for this project.

III. FREEFORM SCREEN MANAGER AND BRITTON-LEE IDM DATABASE

- A. **Objective:** Provide optimized database applications. Assist with checkout and troubleshooting of new releases.
- B. **Results:** New Freeform version was not clean. It is much improved but still has problems. Set up Database Profile reports for PED

and assisted with database load. Modified relief valve reports. CTSD Britton-Lee applications converted to use Ethernet TCP/IP.

- C. Conclusions: The stability of these products needs to be improved.
- D. Plans: Work on resolving known problems and on capacity and backup issues.

IV. LAB AUTOMATION

- A. Objective: Assist scientists with specification of equipment needed for lab automation.
- B. Results: Assisted three users with specification of computer equipment to do data collection and analysis from and control of lab instruments. Initiated two evaluations: TOPS/NFS and DADISP.
- C. Plans: Review specifications with user. Assist with procurement and installation. Evaluate TOPS/NFS and DADISP.